

# Comparisons of Job Characteristics

**Focus Occupation:** [Computer and Information Scientists, Research \(15-1011\)](#)

**Associated Occupation:** [Database Administrators \(15-1061\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 86

**Focus Occupation:** Computer and Information Scientists, Research (15-1011)

**Associated Occupation:** Database Administrators (15-1061)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Computers and Electronics	8.4	19.9	22.8	> Current knowledge level is likely sufficient
Customer and Personal Service	11.3	14.2	10.8	<< Extensive education and/or training may be required
Clerical	7.3	10.9	9.4	< Expanded education and/or training may be required
Communications and Media	5.3	8.0	9.3	> Current knowledge level is likely sufficient
Telecommunications	3.9	7.3	11.9	>> Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 86

**Focus Occupation:** Computer and Information Scientists, Research (15-1011)

**Associated Occupation:** Database Administrators (15-1061)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Systems Analysis	6.5	10.6	13.6	>> Skill level is likely more than sufficient
Systems Evaluation	6.4	10.4	14.7	>> Skill level is likely more than sufficient
Programming	2.2	9.9	12.4	> Skill level is likely sufficient
Operations Analysis	5.0	9.6	10.6	> Skill level is likely sufficient
Technology Design	2.6	6.1	10.0	>> Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 98

Focus Occupation: Computer and Information Scientists, Research (15-1011)

Associated Occupation: Database Administrators (15-1061)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Information Ordering	9.9	12.3	12.6	0	Current ability level may be sufficient
Category Flexibility	9.0	11.0	12.4	>	Current ability level is likely sufficient
Flexibility of Closure	7.8	10.1	8.3	<	Some improvement in abilities may be required
Fluency of Ideas	7.6	9.9	12.8	>>	Current ability level is likely more than sufficient
Originality	7.6	9.8	11.0	>	Current ability level is likely sufficient
Selective Attention	8.7	9.8	9.8	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	9.7	10.8	>	Current ability level is likely sufficient
Number Facility	6.3	8.9	9.8	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: Computer and Information Scientists, Research (15-1011)

Associated Occupation: Database Administrators (15-1061)

Work Activities	Exclusivity of Activity
Communicate technical information	4
Design data security systems	89
Develop mathematical simulation models	70
Develop or maintain databases	30
Develop tables depicting data	33
Follow data security procedures	77
Follow data storage procedures	75
Program mainframe computer	84
Provide technical computer training	82
Test computer programs or systems	78
Use computer application flow charts	84
Use computer networking technology	81
Use computer programming language	82
Use computers to enter, access or retrieve data	3
Use geographical information system (GIS) software	72
Use interpersonal communication techniques	10
Use knowledge of mainframe computers	78
Use mathematical or statistical methods to identify or analyze problems	30
Use object-oriented computer programming techniques	85

Use project management techniques	47
Use relational database software	26
Use spreadsheet software	18
Use structural analysis techniques to analyze computer systems	89
Use word processing or desktop publishing software	17
Work as a team member	36
Write computer software, programs, or code	84
Write documentation for computer programming	87

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 92

**Focus Occupation: Computer and Information Scientists, Research (15-1011)**  
**Associated Occupation: Database Administrators (15-1061)**

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Data management and query software	1
Development software	4
Industry specific software	1
Media storage devices	21
Operating environment software	12

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.